

Work Order ID 141898

Friday, February 19, 2016 7:18:30 AM

141898

Page 1

Item ID: D3015-3 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Locknut
 Start Date: 2/19/2016 Start Qty: 200.00 ***200*** Cust Item ID:
 Required Date: 2/26/2016 Req'd Qty: 200.00 ***200*** Customer:
 Reference:

Approvals: Process Plan: MUS Date: FEB 19 2016 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3015	Rev C

100	PURCHASING	0.00						FEB 19 2016	DAS 13 9-89
-----	------------	------	--	--	--	--	--	-------------	-------------------

100
 Purchasing
 Purchasing
 Memo
 Issue P/O: 31423
 Description: SS locknut with nylon insert
 Possible Supplier: Acklands P/N: PFS LNNC516S1
 Material release note required

110	Receive & Inspect for Damage & Mat'l Certs	0.00							
-----	--	------	--	--	--	--	--	--	--

110
 Packaging
 Packaging
 Memo
 Ensure Material Release Note is attached

120	QC6- Inspect dimensions to drawing	0.00							
-----	------------------------------------	------	--	--	--	--	--	--	--

120
 QC
 Quality Control
 Memo

200 DAS 6 9-89 FEB 25 2016
200 DAS 38 9-89 FEB 26 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐				
Date :	Step #:	QTY Effective :			MRB (QS1042) Approval	
Description Work Order Deviation		Disposition			Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
		☐ OTHER : _____				

Work Order ID 141898

141898

Page 2

Friday, February 19, 2016 7:18:30 AM

Item ID: D3015-3 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Locknut
 Start Date: 2/19/2016 Start Qty: 200.00 *200* Cust Item ID:
 Required Date: 2/26/2016 Req'd Qty: 200.00 *200* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>Sto25A</u>	0.00							
130									
Packaging	Memo	0.03							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.33							
Quality Control									

200 MLS 16-02-28

MLS FEB 26 2016

MLS FEB 26 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		☐ OTHER : _____							

Picklist Print

Friday, February 19, 2016 7:18:34 AM

Page 1

Work Order ID: 141898

141898

Parent Item: D3015-3

D3015-3

Parent Item Name: Locknut

Start Date: 2/19/2016

Required Date: 2/26/2016

Start Qty: 200.00

Required Qty: 200.00

Comments: IPP: A01.06.28New IssueSM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
PFS-LNNC5/16S1		Purchased	No			110	Each	0.0000	1	200			
PFS-I NNC5/16S1										**			
Lock Nut													

DAS

6

9-89

FEB 25 2016

DQA: _____ Date: _____



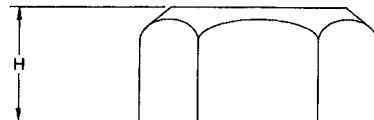
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐						
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY								
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling ☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre ☐	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material ☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport ☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge ☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA ☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation ☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date ☐	☐	Manufacturing Process	OTHER : _____							
Misidentified ☐	☐	Past Due								

SPECIFICATION CONTROL DRAWING



D3015-X LOCKNUT

PART NUMBER	SIZE	HEIGHT H	POSSIBLE SUPPLIER
D3015-1	1/4-20 UNC	0.31	ACKLANDS, P/N PFSLNNC14S1
D3015-3	5/16-18 UNC	0.34	ACKLANDS, P/N PFSLNNC516S1
D3015-5	7/16-14 UNC	0.46	ACKLANDS, P/N PFSLNNC716S1
D3015-7	M5	0.19	ACKLANDS, P/N FLMN021-005-0000

△

NOTES:

- 1) MATERIAL: SS LOCKNUT WITH NYLON INSERT
- 2) FINISH: N/A
- 3) TOLERANCES: ALL DIMENSIONS SHOWN AS REFERENCE
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 141898 ML5
16-02-19

RELEASED
09/07/15

C	REFORMAT DWG. -7 P/N NOW FLMN021-005-0000 WAS LNNMSS1 (ZN 88-1), PAR 09-020	CP	09.07.08
B	ADD D3015-7	KJ	03.07.15
A	NEW ISSUE	DS	01.05.03
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.07.08		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D3015** REV. C
SHEET 1 OF 1
TITLE **LOCKNUT** SCALE NTS

COPYRIGHT © 2001 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR DISSEMINATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval			
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval			
Root Cause		FAULT CATEGORY									
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :							
Misidentified	☐	Past Due	☐								

		ACKLANDS-GRAINGER INC. 3020 HAWTHORNE ROAD UNIT 700 OTTAWA ON K1G 3J6 (613) 744-5012 www.acklandsgrainger.com		Acklands-Grainger tax ID / N° taxe : 88970-1272/TVQ# 1019602903		PACKING SLIP / BORDEREAU D'EXPÉDITION Customer PO / Du client PO:  31423							
				Customer tax ID / N° taxe du client:									
				Contact / Contact: LAVOIE (613)632-9577									
Sold to / Vendu a: DART AEROSPACE LTD DART AEROSPACE LTD VMI 1270 ABERDEEN ST HAWKESBURY ON K6A 1K7 CA			Ship to / Adresse d'expédition: DART AEROSPACE LTD DART AEROSPACE LTD VMI 1270 ABERDEEN ST HAWKESBURY ON K6A 1K7 CA			Delivery / Livraison:  6316381549							
Shipping conditions / Conditions d'expédition: Ship		Incoterms / Incoterms: Free on board,ORIGIN		Payment terms / Conditions de paiement: Net 30 days after invoice date		Account manager / Directeur des comptes: 350369		Order / Commande 1255559997		Delivery date / Date d'envoi: 02/24/2016		Order date / Date de la commande: 02/22/2016	
Requisitioner / Demandeur:		Freight terms / Modalités de fret: Prepaid and Add		Carrier / Transporteur:		Notes / Remarques:							
Line / Ligne	PO line / Ligne de BC	Material / Matériau	Customer material / Matériau du client	Description / Description		Ship quantity / Quantité	Order quantity / Quantité commandée	UoM / Unité de mesure	Unit price / Prix unitaire	Per / Par	Extended price / Prix total		
000010		FPBU51000.031.0150		CAPSCREW SS204 UNC 5/16-18X1-1/2 <i>16/2/255</i>		200.000	200.000	EA	27.46	100	54.92		
						Freight / Fret					0.00		
						Subtotal / Total partiel					54.92		
Received by / Recu par:						PST/QST / TVP/TVQ					0.00		
						HST/GST / TPS/TVH					7.14		
						Order total / Total de la commande					62.06		



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO31423**

Purchase Order Date 2/19/2016 1:08:16 PM

PO Print Date 2/22/2016

Page Number 1 of 3

Order From :

VC-ACK001

Ship To : DART AEROSPACE LTD

ACKLANDS - GRAINGER INC.
P.O. BOX 2970
WINNIPEG, MB R3C 4B5
CA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

REVISED

Contact Name

Vendor Phone

613 632 2739

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Ship To Contact

Ship To Phone

Terms

Net 30

Ship Via:

VENDOR'S TRUCK

Currency

CAD

Ship Acct:

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	5/16-18-015C acklands p/n: FPB U51000.031.0150	SS Bolt 5/16-181.5"K	2/25/2016 Yes 2/25/2016	FN	200.00 Each	\$0.27	\$54.90
Line Total:							\$54.90
2	5/16WC ACKLANDS P/N: FPB U51205.031.0001	Washer	2/25/2016 Yes 2/25/2016	FN	1,000.00 Each	\$0.03	\$33.80
Line Total:							\$33.80
3	PFS-LNNC5/16S1 AS PER DWG D3015 REV. C B141898 ACKLANDS P/N: FPBU51738.031.0001	Lock Nut	2/25/2016 Yes 2/25/2016		200.00 Each	\$0.10	\$20.20

Note:

2/22/2016